

**The Maryland Healthcare Commission  
Health Information Organization Research**

**Vermont - VITL**

February , 2009

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Section	Requirement	Definitions	Vermont - VITL
Vision	<b>Vision</b>	Clear description of how to respond the unique needs an opportunities of HIE in state	Finish next 2009
	Mission		
	Principles from Appendix B		
	Interoperability		
	Quality of care		
Strategy and Planning			
	<b>Financial Model and Sustainability</b>	Economic Analysis of cost and benefit for each phase of implementation	Health IT fund established in 2008 that 2/10 of 1% on medical claims would be in a fund for VITL. Requested by the health department.
	Financially sustainable		
	Transaction fees		
	Subscription fees		
	Membership fees		
	Hospital funding		
	State Funding		
	Federal Funding		
	Health Plan funding		\$1M raised for HER Pilot Program and the Grant Program from 4 major payers in state
	Physician funding		
	Philanthropic funding		
	Budget		
	capital		
	operating costs		
	Salaries		
	Benefits		
	Office expense		
	Rent		
	Utilities		
	Software purchase and maintenance		
	Hardware purchase and maintenance		

	Taxes		
	Cyber Liability Insurance		
	cash flow		
	break even analysis		
	Community Benefit		
	Benefit Realization		
	ROI - financial measurement		Measurements are performed on the electronic health record project whereby physician offices are held to five milestone grant payment to prove they have meaningful use of their systems. Modeled after the stimulus bill and is based on improved receivables, use of e-prescribing and patient satisfaction.
	ROI - quality measurement		
	ROI - System use measurement		
	how many users		
	what do they access		
	<b>Governance Framework</b>	A multi-stakeholder approach that represents the needs of the community and all stakeholders	
	Plan for engaging stakeholders		VITL has a plan for this on the website
	Ownership model: Public-Private Partnership		
	Profit Status: Not-for-profit		
	Articles of Governance		VITL is still applying for the 501 c 3 status and proving that they serve a public good
	Role of Local HIEs:		
	May include but not require creation of independent governance entities to oversee regional or local HIE. All HIEs would conform with statewide policies, standards and rules.		VITL is the statewide HIO but they don't discourage other formation of RHIO's but those would have to connect through VITL
	RHIO participation will be required (required as regional governance entities)		
	Local HIEs must be inclusive and non-discriminatory		

	Technical Operations		
	Separate governing structure from technical operations (potential for combination in latter stages)		
	Governance and technical operations in single entity		
	Accountability Mechanisms		
	Direct oversight through contracts with incentives for adherence and penalties for non-adherence		
	Direct oversight via legislation		
	Board of Director Composition		
	Governor's Office		Board Representation; Legislative as well
	State Medicaid Agencies		
	State Department of Health		
	State Healthcare and Hospital Association		
	State Medical Association		
	Other non-profits who are involved in the medical community		Represented on the Board
	Government Agencies who may be a stakeholder		
	Consumers		
	Employers		
	Insurers		Represented on the Board
	Health Care Providers		Represented on the Board
	Pharmacy		
	Clinical Laboratories		
	Higher Education		Represented on the Board
	Quality Organizations		
	Operational / Management Positions and Responsibilities		
	Positions		Staffing is Greg plus 7 full time people - leverage ehealth vendor GE staff of 200 or 300 they tap into. Use consultants. 7 part time people.
	Executive Director		

	Staff		
	2 program staff, controller, 2 adm assistants		
	Privacy and Security Officer		
	Responsibilities		
	Execute strategic, business and technical plans		
	Coordinate day-to-day tasks and deliverables		
	Establish contracts and other relationships with local/sectoral initiatives		
	Provide industry knowledge		
	Advise the Board		
	Board Committees and Responsibilities		
	Governance Board		Executive Committee
	Maintain vision, strategy, and outcome metrics		
	Build trust, buy-in and participation of major stakeholders statewide		
	Assure equitable and ethical approaches		
	Develop high-level business and technical plans		
	Approve statewide policies, standards, agreements		
	Balance interests and resolve disputes		
	Raise, receive, manage and distribute state, federal, private funds		
	Prioritize and foster interoperability for statewide and sub-state initiatives		
	Implement statewide projects and facilitate local/sector projects		

	Identify and overcome obstacles		
	Financial and legal accountability, compliance, risk management		
	Educate and market		
	Facilitate consumer input (Others in MCHIE document worth reviewing and making sure tie back to above)		
	Determining compensation for staff		
	Board Committees		
	Broadens stakeholder representation in governance body		
	Provides content expertise in very specific areas		
	Represents clinicians, consumers, employers and payers		
	Suggested Committees:		Board level and one advisors committee - finance governance executive and practioner advisory group and consumer committee.
	Steering Committee		
	Privacy and Security (legal, S & P officers)		
	Clinical		Practioners Committee
	Technical		
	Standards		
	Outreach and Education		
	<b>Privacy and Security</b>		Participated in HISPC Phases
	<b>Registration</b>		
	<b>Registration authority</b>		
	<b>Trusted relationship (i.e. hospital)</b>		
	Authentication –		
	providers		
	consumers		
	public health		

	other institutions (educational)		
	non licensed providers (if any exist in state)		
	data authentication (in and out of HIO)		
	system authentication (system accessing HIO)		
	Identification -		Master Person index - for providers. Consumers do not have direct access yet.
	Use of a master person index to provide provider and consumer information		Provider only
	public health		
	other institutions (educational)		
	non licensed providers (if any exist in state)		
	data identification		
	system identification		
	Credentialing of health care providers		
	Audit – providers, consumers, data		
	what is audited		
	who audits		
	how often		
	external audit requirements		Modeling from OTR Guidance - have 5 different policies around enforcement, use, breach etc. Compliant with state and federal laws.
	rules of enforcement		
	Authorization – providers, consumers, data		
	providers authorized to see what data		Identified data flows to providers, de-identified data is flowing for the medical home project
	consumers authorized		
	public health		
	other institutions (educational)		
	non licensed providers (if any exist in state)		

	data authorization		
	system authorization		
	Access – role based using HL7 standards		access if everyone but consumers - identified data flows to treating providers - de-identified flowing for medical home project.
	Who can access what data		
	Who can change, update data		
	Sensitive specially protected health information - substance abuse, HIV/AIDS, genetic etc.		For this data, the opt in from has it spelled out so the consumer can select it. Med History is 95% opt in rate.
	Consent Framework		
	Opt In	*if patient opts out does the data still go to the HIO without allowing it to be viewed, changed etc.	Opt In model - patient privildge statute goes above and beyond HIPAA - opt in to exchange of their information.
	Opt Out	Recommend reviewing California consent models - very detailed based on use cases	
	Notice only to consumer that their information in accessible via HIO		
	Use of de-identified data		
	Legal Agreements:		
	master participation agreement		In place
	use agreement		In place
	business associate agreements		In place
	Policy and Procedures	Develop sound policy to manage authorization and access to electronic patient information in a consumer centric approach to health information exchange (Privacy and Security Policies)	In place
	authentication		
	audit		
	authorization		
	access		

	consent		
	enforcement - statewide that all must adhere to and may require legislation or ownership by AG office		
	Break the glass		
	Form relevant policy to enable improved community health status		
	HRB		
	Support for Policies Governing Patient Authorization for Data Sharing		
	Legal Issues		
	HIPAA considerations		
	MDCMRA as may be required		Consumer Advisory Committee - started and restarted a couple time - have a plan for this - used them on specific work task around policy considerations. Lots of education done - dense area of study. Technology and Health care information and Legal.
	Stakeholder Outreach and Education	Ensure Transparency, convene all stakeholders, educate	A survey was completed with 500 consumers (random digit dial) and found that consumers want electronic records.
	Part of statewide governing body		
	Documented process to educate:		
	Consumers		Consumer Advisory Committee has been started and re-started a couple of time and they have a new plan for this. They have done a lot of education around the state. VITL finds that the outreach works best if you give people something to do. Specific work tasks.
	Under-served		
	Providers		
	Public Health		
	Government Agencies		
	Non-profits		



	Understanding of market forces - patterns of care , who to connect with and political environment		Working with QIO and VPQIC
Detail Design	Care Delivery	Implementation Sequencing – Who has access first and Implementation Phasing - What information is available first	By end of 2009 50% of the major providers in the state and large hospitals will be part of VITL
	Phase 1:		
	Data Partners		
	Hospitals		
	Laboratories		
	Clinics		
	Pharmacies		
	Individual Physician Practice		
	Nursing Homes		
	State Health Agencies		
	Quality Organization		
	Medicare		
	Medicaid		
	Insurers		
	Data Exchange Requirements		
	Use case analysis to determine actors, information they need, how to provide:		
	Clinical Decision Support Tools		
	Medication history and reconciliation		Study completed showing that Rx-HUB is best for medical history and e-prescribing
	outpatient prescriptions		VITL is sharing medication history
	pharmacy prescriptions		VITL is sharing medication history
	e-prescribing and prescription histories		
	Allergy and drug-drug interaction alerts		
	Access to drug formularies for Medicaid and MD's two top private insurers		
	Lab results		VITL is sharing lab results
	outpatient lab results		

	Outpatient episodes		
	Radiology Results		
	Radiology images		
	Inpatient episodes		
	Dictation / transcription		
	Claims		
	Pathology		
	enrollment / eligibility		
	Cardiology		
	GI		
	Pulmonary		
	Hospital discharge summary		
	Emergency room reports		
	Patient Reported Data		
	Ambulatory electronic health record		
	Disease Management Tools		
	Wellness and prevention support based on national proactive guidelines - disease management		
	Medical Alerts		
	Demographics		
	Application Functionality		
	Evaluate the following applications based on use case analysis:		VITL is using GE Healthcare and applications are hosted by GE
	clinical messaging		VITL has results messaging on a secure FTP point to point network which is their private network. The messaging is an interface structured standard document for physicians and custom to the physician code set.
	Continuity of care records (CCD)		
	Longitudinal health records		
	Elements of Shared Health Record		VITL is hosting an electronic health record for physicians, they chose from five systems selected using CCHIT requiriements. This program should be researched further.
	Insurance Eligibility		

	Functionality to Support Access to Data for Research		
	Support for External Information Requests		
	Master person index		
	Record Locator Service		
	Health Record Banking		Personal Health Record has been reviewed but VITL is waiting for the Markle document on this.
	Auditing		
	Security Applications		
	System Architecture		
	Plan for interfaces of data from data providers		They do have a distinction between standards for exchanging data and the internal standards a data partner may have. Recognizing they would be different.
	Push / Pull		
	Central Repository vs. Federated Model		Combination of a central repository and a RLS
	Record Locator - Edge Servers		They use a registry which is similar to a RLS HITSP compliant and the data is self contained.
	Hybrid Model		
	MPI		
	HRB with opt-in		
	Web-based application (portal)		
	Reporting		
	Standards		VITL is using all the national standards that would apply
	Standards for Message and Document Formats (HL7)		
	Standards for Clinical Terminology		

	Provide and implement CCHIT certified EMRs for selected physicians as determined by XXXXX with options including: EMR license with physician storing in office; license with storage at hospital or health bank; license with storage at vendor; ASP model		VITL is providing this service
	HITSP-endorsed IHE approach appropriate for supporting distributed data or HRB		
	ASTM Standards		Use these standards -
	NIST e-authentication		
	IHE		
Implementation	Project Management		
	Team Selection		
	Detail Schedule		
	Task development		
	Hardware infrastructure		
	Software Solution Deployment		
	Interface analysis		
	Interface Development		
	Agreement negotiation		
	Solution Testing		
Maintenance	Operations processes		
	Staffing		
	Support Services		